



DEPARTMENT OF THE INTERIOR

INFORMATION SERVICE

FISH AND WILDLIFE SERVICE

For Release APRIL 4, 1961

SECRETARY UDALL LUNCHEON POINTS WAY TO END PROTEIN DEFICIENCY

A prelude to a program aimed at helping to end dietary protein deficiency, and which may prove a boon to peoples in underdeveloped areas, was given today (April 4) at a luncheon at the Department of the Interior by Secretary Stewart L. Udall.

Secretary Udall served cookies to his guests to which had been added fish flour, a convenient supplement to diets of protein-starved persons--an innovation which many believe could change the lives of countless persons in the nations of the world. Over two-thirds of the world's population suffer from protein malnutrition.

The term "fish flour" is actually a misnomer, and those engaged in the research to produce this material in quantities prefer to call it "animal protein concentrate." It contains little or none of the carbohydrates and starches found in grain flour. Rather, it contains up to 95 percent of animal protein. These proteins contain all of the 10 amino acids which are essential for the development of bone and muscle and for the daily maintenance and repair of bodily tissues.

The concentrate can be made from nonutilized fishes, the Department's Fish and Wildlife Service technicians report. The United States alone could easily supply from one locally available species of fish and without reference to other species of industrial fish commonly available, sufficient concentrate to treat 100 million humans with a dietary supplement level of one ounce of concentrate daily, for about a year.

The amount could be increased many times by utilization of the numerous domestic fish species which are little used or not used at all, at present. In developing countries, where many but not all of the 10 amino acids are available from vegetable protein sources, the United States production from one species of fish alone would adequately supplement the diet of 330 million humans for a year.

Major obstacles to the development of a substantial fish concentrate industry in this country is the lack of process engineering studies which would assure an inexpensive but consistently highly nutritious product. The Bureau of Commercial Fisheries, Fish and Wildlife Service, hopes to undertake such work in the near future.

The Bureau's home economists made the cookies used by Secretary Udall today. In the amounts used, the concentrate was undetectable as to taste or appearance. Nevertheless the protein concentrate added was sufficient for five cookies to provide 14 percent of the animal protein needed daily by a 6-year-old child, and 8 percent of the amount needed by a 154-pound U. S. adult male.

Guests at the Udall luncheon included Frank P. Briggs, Assistant Secretary of the Interior for Fish and Wildlife; Charles E. Jackson, General Manager of the National Fisheries Institute, and Harold J. Humphrey, consultant to the Food Conservation Division of the United Nations International Children's Emergency Fund. Mr. Jackson presented the cookies to Secretary Udall and explained the possibilities of the concentrate in the diet of underdeveloped nations and to people of all nations.

At the fish meal meeting in Rome held by the United Nation's Food and Agriculture Organization in late March several matters pertinent to the world's diet were discussed.

Lack of adequate protein in the child's diet results in failure of growth, muscular wasting and oedema of varying degrees--the so-called "kwashiorker" of West Africa--or in "marasmus", failure of growth and wasting of tissues. The mortality rate in both instances, if untreated, is high.

The Rome meeting attempted to estimate how many human beings in the world now suffer from protein deficiency. An estimate of at least 500 million was made, including four-fifths pre-school age children with most of the remainder being pregnant and nursing mothers.

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